


FILTER


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Returns a table that represents a subset of another table or expression.

Syntax

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<code>FILTER(<table>,<filter>)</code>	

Parameters

Term	Definition
table	The table to be filtered. The table can also be an expression that results in a table.
filter	A Boolean expression that is to be evaluated for each row of the table. For example, <code>[Amount] > 0</code> or <code>[Region] = "France"</code>

Return value

A table containing only the filtered rows.

Remarks

- You can use FILTER to reduce the number of rows in the table that you are working

You can use FILTER to reduce the number of rows in the table that you are working with, and use only specific data in calculations. FILTER is not used independently, but as a function that is embedded in other functions that require a table as an argument.


- This function is not supported for use in DirectQuery mode when used in calculated columns or row-level security (RLS) rules.

Example

The following example creates a report of Internet sales outside the United States by using a measure that filters out sales in the United States, and then slicing by calendar year and product categories. To create this measure, you filter the table, Internet Sales USD, by using Sales Territory, and then use the filtered table in a SUMX function.

In this example, the expression:

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```
FILTER('InternetSales_USD', RELATED('SalesTerritory'[SalesTerritoryCountry])
<>"United States")
```

Returns a table that is a subset of Internet Sales minus all rows that belong to the United States sales territory. The RELATED function is what links the Territory key in the Internet Sales table to SalesTerritoryCountry in the SalesTerritory table.

The following table demonstrates the proof of concept for the measure, NON USA Internet Sales, the formula for which is provided in the code section below. The table compares all Internet sales with non- USA Internet sales, to show that the filter expression works, by excluding United States sales from the computation.

To re-create this table, add the field, SalesTerritoryCountry, to the **Row Labels** area of a report or PivotTable.

Table 1. Comparing total sales for U.S. vs. all other regions

Row Labels	Internet Sales	Non USA Internet Sales
Australia	\$4,999,021.84	\$4,999,021.84
Canada	\$1,343,109.10	\$1,343,109.10

Row Labels	Internet Sales	Non USA Internet Sales
France	\$2,490,944.57	\$2,490,944.57
Germany	\$2,775,195.60	\$2,775,195.60
United Kingdom	\$5,057,076.55	\$5,057,076.55
United States	\$9,389,479.79	
Grand Total	\$26,054,827.45	\$16,665,347.67

The final report table shows the results when you create a PivotTable by using the measure, NON USA Internet Sales. Add the field, CalendarYear, to the **Row Labels** area of the PivotTable and add the field, ProductCategoryName, to the **Column Labels** area.

Table 2. Comparing non- U.S. sales by product categories

Non USA Internet Sales	Column Labels			
Row Labels	Accessories	Bikes	Clothing	Grand Total
2005		\$1,526,481.95		\$1,526,481.95
2006		\$3,554,744.04		\$3,554,744.04
2007	\$156,480.18	\$5,640,106.05	\$70,142.77	\$5,866,729.00
2008	\$228,159.45	\$5,386,558.19	\$102,675.04	\$5,717,392.68
Grand Total	\$384,639.63	\$16,107,890.23	\$172,817.81	\$16,665,347.67

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```
SUMX(FILTER('InternetSales_USD', RELATED('SalesTerritory'[SalesTerritoryCountry])<>"United States"),
      'InternetSales_USD'[SalesAmount_USD])
```

See also

[Filter functions](#)

[ALL function](#)

[ALLEXCEPT function](#)

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 Yes  No
